Amendments to the Specification

Please insert the following paragraphs after page 2, line 21:

In the present invention, separation and measuring processing of the body adipose can be performed by following processing (1) to (7).

(1) A body region is extracted from a tomographic image of a subject (the first extraction processing).

(2) Each region of non-adipose regions such as an epidermal region, a muscle region, a bone region and the like is extracted (the second extraction processing).

(3) The epidermal region (i.e., a region where epidermal tissue exists) which is extracted in the processing (2) is removed from the body region extracted in the processing (1).

(4) The muscle region, the bone region and the like (non-adipose regions other than the epidermal region) are removed from the result of the processing (3). The result thus obtained is a total body adipose region. The processing (3) and (4) are the third extraction processing.

The total body adipose region is extracted from the body region by the above-described processing (1) to (4). That is, the epidermal region, which is one of non-adipose regions, is first removed from the body region, other non-adipose regions such as the muscle region, the bone region and the like are further removed from the result, and the total body adipose region is obtained by these processes.

(5) An information of boundary of an abdominal region is set according to the position of information of the muscle and bone regions extracted in the processing (1).

(6) A region where an inside of the abdominal region set in the processing (5) and the total adipose region extracted in the processing (4) overlap is set as a visceral adipose region in the abdominal region.

(7) In the total adipose region extracted by the processing (1) to (6), a region other than the visceral adipose region in the abdominal region (that is, a region where an inside of the boundary of the abdominal region set in the processing (5) and the total body adipose region extracted in the processing (4) does not overlap) is set as a subcutaneous adipose region.

By the above-described processing (5) to (7), the total adipose region is separated to the visceral adipose region and the subcutaneous adipose region (a separating processing).

In the present invention, "a non-adipose region" means a region other than an adipose region, i.e., an extraction of total fat area.

In the present invention, "an adipose region" means a region obtained by removing the non-adipose region from the body adipose region.

Please amend the paragraph at page 6, lines 4-29 in the following manner:

Figure 7 is a flowchart of the visceral region extraction processing (S205). First, the threshold processing of the image data in the body region 401 is performed to create a binary image (S701). The threshold is preset so that a region (hereinafter referred to as an abdominal wall muscle layer region) 801 to be recognized as a muscle tissue layer (an abdominal wall muscle layer) and a bone tissue layer in Figure 8(a) is clearly extracted. Also, a pixel value (a CT value) of the abdominal wall muscle layer is usually in a range of -50 to 100, and thus a CT value range of the abdominal wall muscle layer may be sequentially searched for from the CT image with the most frequent CT value in the range of -50 to 100 as a median value in the CT value histogram to automatically set a threshold. Next, peripheral edge recognition processing of the binary image created in S701 is performed to radially set attention points on the recognized peripheral edge (S702). The recognized peripheral edge is traced to extract an outline of the abdominal wall muscle layer including the whole viscus. However, actually, the abdominal wall muscle layer does not continuously surround the viscus but gaps are present in several spots, and thus for such an abdominal wall muscle layer with the gaps, the outline of the abdominal wall muscle layer including the whole viscus cannot be extracted simply by tracing the peripheral edge. Thus, spaces between the attention points set in S702 are interpolated by higher order spline interpolation to interpolate the gaps in the abdominal wall muscle layer and extract an outline 802 of the visceral region as shown in Figure 8(b) (S703). In S703, the higher order spline interpolation can be performed by publicly known method. Then, region extraction processing of the outline 802 using a region

expansion method is performed to extract a visceral region 803 as shown in Figure 8(c) (S704). Next, pixels having pixel values within the adipose threshold range among pixels that form a region obtained by subtracting the abdominal wall muscle layer region 801 from the visceral region 803 are extracted as adipose pixels, and "2" is stored in a position corresponding to the adipose pixels in the adipose image buffer (S705). The adipose pixels thus extracted correspond to the visceral adipose.

Please amend the paragraph at page 9, lines 10-22 in the following manner:

Figure 19 is a flowchart of a third embodiment for measuring body adipose of a subject using a medical image diagnosing support apparatus 10. Image input is performed as in S201 and S202 in Figure 2 (S1901), body region extraction processing is performed like the processing in S203 in Figure 2 (S1902), and a navel region is identified like the processing in S204 in Figure 2 or the processing in S1403 in Figure 14 (S1903). Then, a preset region is removed from the body region ~~peripheral edge recognized~~ extracted in S1902, and thus ~~a region including~~ an epidermal region, i.e., the region where epidermal tissue exists, is removed from a region for body adipose measurement (S1904). Then, extraction processing of a muscle and bone region is performed like the processing in S701 in Figure 7 (S1905). Then, navel region removal processing (S1906) and estimation of the subcutaneous adipose region (S1907) are sequentially performed. Then, adipose region dividing processing is performed like the processing in S205 in Figure 7 or the processing in S1205 in Figure 12 (S1908), and result output (S1909) is performed as in S207 and 208 in Figure 2.